

Serial No. 10/567,667
Atty. Doc. No. 2003P09584WOUS

RECEIVED
CENTRAL FAX CENTER

JUL 09 2007

Amendments To The Claims:

Please amend the claims as shown.

1 - 7 (canceled)

8. (Currently amended) An axial flow gas turbine engine arranged about a central axis, comprising:

a compressor section;

a combustion chamber;

a turbine section having a plurality of guide vane rings and rotor blade rings arranged in axial succession in a hot-gas duct that contains a hot gas flow;

a cooling air flow for cooling the guide vane rings and the rotor blade rings, where the pressure of the cooling air flow decreases in the direction of the hot gas flow; and

a guide vane carrier

a flat sealing element arranged between a groove in the guide vane ring and ~~a directly adjacent rotor blade ring~~ a groove in the guide vane carrier which seals the different pressure levels associated with the respective adjacent rings and extends as a single piece around at least a quarter of a circle concentric with the central axis of the engine; and

means for urging the sealing element against the grooves in the guide vane ring and guide vane carrier and applying pressure against the middle of the sealing element so as to evenly apply the pressure to both the grooves.

9. (Previously presented) The gas turbine as claimed in claim 8, wherein the sealing element extends half of the circle.

10. (Previously presented) The gas turbine as claimed in claim 9, wherein the sealing element is formed as an annular metal sheet with a surface extending in the radial direction and having an outer and an inner edge.

Serial No. 10/567,667
Atty. Doc. No. 2003P09584WOUS

11. (Currently amended) The gas turbine as claimed in claim 10, wherein the sealing element inner edge is arranged in grooves within a guide vane ring that is located in the side furthest from the hot-gas duct and the outer edge is arranged in a carrier groove in the guide vane carrier, the guide vane carrier having a predetermined groove side wall.

12. (Currently amended) The gas turbine as claimed in claim 11, wherein the sealing element is clamped to the ~~grove~~ groove side wall using a screw which presses the sealing element onto the opposite platform groove side wall and predetermined carrier groove side wall, the screw pressing against the middle of the sealing element on the surface thereof.

13. (Previously presented) The gas turbine as claimed in claim 12, wherein the guide vanes each have an axial fixed point at which they are fixed against axial displacement in the guide vane carrier by a hooked formation, with the sealing element being arranged in the region of the axial fixed points.

14. (Previously presented) The gas turbine as claimed in claim 10, wherein the guide vanes each have an axial fixed point at which they are fixed against axial displacement in the guide vane carrier by a hooked formation, with the sealing element being arranged opposite the region of the axial fixed points.

15. (Currently amended) An axial flow gas turbine engine sealing system, comprising:

a guide vane ~~or carrier~~ ring having a groove; and

a guide vane carrier having a groove;

a sealing element arranged between ~~a~~ the guide vane ring and ~~a directly adjacent rotor blade ring~~ the guide vane carrier which seals the different pressure levels associated with the respective adjacent rings and extends as a single piece around at least a quarter of a circle concentric with the central axis of the engine; and

means for urging the sealing element against the grooves in the guide vane ring and guide vane carrier and applying pressure against the middle of the sealing element so as to evenly apply the pressure to both the grooves.

Serial No. 10/567,667
Atty. Doc. No. 2003P09584WOUS

16. (Currently amended) A semi-annular turbine blade and vane stage seal, comprising:
- | an inner seal edge arranged in a guide vane ~~grove~~ groove that is located distal a hot gas duct;
 - | an outer seal edge arranged in a vane carrier ~~grove~~ groove;
 - | a metallic seal sheet positioned within the grooves of the guide vane and vane carrier and having an arc length between 90° and 180°;
 - | wherein the stage seal isolates different cooling flow pressure levels associated with an adjacent stage.; and
 - | means for urging the sealing element against the grooves in the guide vane ring and guide vane carrier and applying pressure against the middle of the sealing element so as to evenly apply the pressure to both the grooves.